

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION CITY VIEW PLAZA II, SUITE 7000 GUAYNABO. PUERTO RICO 00968-8069

SEP 1 7 2013

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Article Number: 7009 2250 0003 8661 5208

Alberto M. Lázaro Castro, P.E. Executive President Puerto Rico Aqueduct and Sewer Authority P.O. Box 7066 San Juan PR 00916-9990 Honorable Carmen Yulín Cruz Soto Mayor Municipality of San Juan P.O. Box 9024100 San Juan, Puerto Rico 00902-4100

Eng. Miguel A. Torres Secretary Puerto Rico Department of Transportation and Public Works PR Dept. of Transportation and Public Works P.O. Box 41269 San Juan PR 00940-1269

Re: DNER De Diego Pump Station Drainage Area Reconnaissance Inspection July 11, 2013
Municipality of San Juan ("MSJ") Municipal Separate Storm Sewer System ("MS4") Permit
(PRR040036)

PRASA Puerto Nuevo Wastewater Treatment Plant Collection System (PR0021555) Puerto Rico Department of Transportation and Public Works (DTPW) MS4 Permit (PRR040080)

Dear Messrs. Lázaro, Torres, and Mrs Cruz:

This letter is in reference to the National Pollutant Discharge Elimination System ("NPDES") Reconnaissance Inspection ("RI") with field sampling conducted by the United States Environmental Protection Agency's ("EPA") Region 2, Water Compliance Branch and Caribbean Environmental Protection Division on July 11, 2013. This report indicates that certain potential non-compliance items and/or areas of concern which must be corrected and/or investigated to ensure compliance with your respective NPDES Permits

Within forty five (45) days of receipt of this letter, respond to EPA-CEPD in writing with the actions that MSJ, PRASA, and DTPW has taken or will take to address the non-compliance items and areas of concern identified in the report. MSJ, PRASA and/or DTOP must add these items to its Action Registry, and work to correct these items in an expeditious manner. If the item has already been addressed also please note that in your response. Given that the DNER De Diego Pump Station discharges to a public beach, to protect public health, it is important that the non-compliance items and/or areas of concern identified in this report be given a high priority for Illicit Discharge Detection and Elimination Work. However, if these items require extensive repairs and/or capital investments, than the work shall be scheduled in consideration of other priorities and the schedule included on the Action Registry.

Also, send a copy of your response to Douglas McKenna, Chief Water Compliance Branch, EPA Region 2, 290 Broadway, NY, NY 10007 and to Wanda E. García Hernández, Director, Water Quality Area, EQB, Puerto Rico Environmental Quality Board, P.O. Box 11488, Santurce, Puerto Rico 00910

If you have any questions please feel free to contact me at 787-977-5840.

Sincerely,

Jawne Gél Chief

CEPD-MWPB

Enclosure

cc: Wanda E. García Hernández, Director, Water Quality Area, PREQB

Eng. María Matos, Municipality of San Juan, Environmental Affairs Program

Eng. Hans Figueroa, Consultant, PRDNER, "Hans Figueroa" hans@caribe.net>,

Hon. Carmen R. Guerrero Pérez, Secretary, PRDNER

Ms. Irma López, Acting Director, Compliance and Quality Control, PRASA

Eng. Carmen G. Alicea, Chief, Env. Studies Office PR Dept. of Transp. and Public Works



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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Article Number: 7008 1140 0004 1564 6218

Alberto M. Lázaro Castro, P.E. Executive President Puerto Rico Aqueduct and Sewer Authority P.O. Box 7066 San Juan PR 00916-9990 Honorable Carmen Yulín Cruz Soto Mayor Municipality of San Juan P.O. Box 9024100 San Juan, Puerto Rico 00902-4100

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Re: DNER De Diego Pump Station Drainage Area Reconnaissance Inspection July 11, 2013
Municipality of San Juan ("MSJ") Municipal Separate Storm Sewer System ("MS4") Permit
(PRR040036)
PRASA Puerto Nuevo Wastewater Treatment Plant Collection System (PR0021555)
Puerto Rico Department of Transportation and Public Works (DTPW) MS4 Permit

Dear Messrs. Lázaro, Torres, and Mrs Cruz:

(PRR040080)

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Sincerely,

Jaime (

Chief

CEPD-MWPB

Enclosure

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Eng. María Matos, Municipality of San Juan, Environmental Affairs Program
Eng. Hans Figueroa, Consultant, PRDNER, "Hans Figueroa" <hans@caribe.net>,
Hon. Carmen R. Guerrero Pérez, Secretary, PRDNER
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION CITY VIEW PLAZA II, SUITE 7000 GUAYNABO, PUERTO RICO 00968-8069 SEP 1 7 2013

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Article Number: 7009 2250 0003 8661 5215

Alberto M. Lázaro Castro, P.E. Executive President Puerto Rico Aqueduct and Sewer Authority P.O. Box 7066 San Juan PR 00916-9990 Honorable Carmen Yulín Cruz Soto Mayor Municipality of San Juan P.O. Box 9024100 San Juan, Puerto Rico 00902-4100

Eng. Miguel A. Torres
Secretary
Puerto Rico Department of Transportation and
Public Works
PR Dept. of Transportation and Public Works
P.O. Box 41269
San Juan PR 00940-1269

Re: DNER De Diego Pump Station Drainage Area Reconnaissance Inspection July 11, 2013

Municipality of San Juan ("MSJ") Municipal Separate Storm Sewer System ("MS4") Permit

(PRR040036)

PD 4 S A Proof Storm Westernate Plant Callection System (PR00021555)

PRASA Puerto Nuevo Wastewater Treatment Plant Collection System (PR0021555) Puerto Rico Department of Transportation and Public Works (DTPW) MS4 Permit (PRR040080)

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Sincerely,

Jaime Géli

CEPD-MWPB

Enclosure

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Ms. Irma López, Acting Director, Compliance and Quality Control, PRASA

Eng. Carmen G. Alicea, Chief, Env. Studies Office PR Dept. of Transp. and Public Works

bee: Barbara McGarry, USEPA - CAPS

M. Lantner, DECA-WCB w/enclosure

Eduardo J. Gonzalez, EPA-ORC electronically via email

Kim Kramer, EPA-ORC electronically via email Diane Gomes, EPA-ORC electronically via email Susan Bruce, EPA-HQ electronically via email Alan Morrissey, EPA-HQ electronically via email

Keith Tashima, USDOJ, ENRD-EES electronically via email Patricia McKenna USDOJ, ENRD-EES electronically via email Rachel K. Evans, USDOJ, ENRD-EES electronically via email



United States Environmental Protection Agency Washington, D.C. 20460

Water Compliance Inspection Report Form Approved.

OMB No. 2040-0057

Approval expires 8-31-98 Section A: National Data System Coding (i.e., PCS) Inspection TypeInspectorFac Type Transaction Code 18-19R201 12 1 3 0 7 1 1 17 3 P R R 0 4 0 0 3 6 11 1 N Facility Self-Monitoring Evaluation Rating Inspection Work Days 73747580 70 U 13 69 Section B: Facility Data Entry Time/Date Permit Effective Date Name and Location of Facility Inspected (for industrial users discharging to POTW, also include POTI name and NPDES permit number Municipality of San Juan MS4 (De Diego Street Drainage Area) July 11, 2013 P.O. Box 9024100, San Juan, Puerto Rico 00902-4100 Exit Time/Date Permit Expiration Date PR Dept. of Transportation and Public Works, P.O. Box 41269, San Juan PR July 11, 2013 00940-1269 Other Facility Data - Other Responsible Officials Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Alberto M. Lázaro Castro, P.E. Executive President, Eng. David Moreno, PR Dept. of Transportation and Public Works Puerto Rico Aqueduct and Sewer Authority Jeannette Villamil, PR Dept. of Transportation and Public Works (PRASA) Puerto Nuevo Regional WWTP, P.O. Box Not Contacted - San Juan MS4 Eng. María Matos: 7066, Barrio Obrero Station, Santurce, Puerto Rico Executive Director Tel. No. (787) 480-2253 00916 NPDES Permit No. PR0021555 Name. Address of Responsible Official/Title/Phone and Fax Number(s) Eng. Miguel A. Torres, Secretary, Puerto Rico Honorable Carmen Yulín Cruz Soto, Mayor Department of Transportation and Public Works Autonomous Municipality of San Juan PR Dept. of Transportation and Public Works, P.O. Box 41269, San Juan PR 00940-1269 P.O. Box 9024100 Contacted San Juan, Puerto Rico 00902-4100 x No Section C: Areas Evaluated During Inspection (Check only those areas evaluated) Operations & Maintenance CSO/SSO (Sewer Overflow) Flow Measurement Permit Sludge Handling/Disposal Pollution Prevention Self-Monitoring Program Records/Reports Pretreatment Multimedia Compliance Schedules Facility Site Review Х Storm Water Laboratory Effluent/Receiving Water Section D: Summary of Findings/Comments (Attach additional sheets of narrative and checklists as necessary) Roberto Martínez - PRASA Metro Region, San Juan Operations Supervisor - 787-406-6413 Contacted - PR Dept. of Transportation and Public Works - MS4 Permit No. PRR040080 SEV Code A0020 WW SSO - Discharge to Waters See Enclosed Report 9/17/13 Agency/Office/Phone and Fax Numbers Date Name(s) and Signature(s) of Inspector(s) EPA Region 2 WCB/(212) 637-3976/ FAX: 637-4211 Murray Lantner, P.E. Environmental Engineer 9/17/13 EPA-CEPD - 787-977-5845 Alex Rivera, Env. Eng. CEPD Agency/Office/Phone and Fax Numbers Date 9/17/13 Signature of Management of A Roviewer

EPA Region 2, CEPD MWPB

787-977-5840

Jaime Géliga, Chief, CDPD-MWPB

SUPPLEMENT TO WATER COMPLIANCE INSPECTION REPORT FORM (EPA FORM 3560-3 (REV 9-94))

DNER DE DIEGO PUMP STATION, DE DIEGO STREET MSJ, PRASA, AND DTPW COLLECTION SYSTEMS

Reconnaissance Inspection: Puerto Rico Department of Transportation and Public

Works (PRR040080)

Department of Natural and Environmental Resources (DNER) De Diego Pump Station Collection System

Puerto Rico Aqueduct and Sewer Authority (PRASA)

Condado Sanitary Sewer System

Puerto Nuevo Regional Wastewater Treatment Plant

Permit No. PR0021555

Municipality of San Juan Municipal Separate Storm

Sewer System (MS4) Permit (PRR040036)

Inspection Date: July 11, 2013

Inspectors: Murray Lantner, P.E. Environmental Engineer

USEPA Region 2, DECA-WCB,

(212) 637-3976

Alex Rivera, Environmental Engineer, USEPA Region 2, CEPD-MWPB,

(787) 977-5845

Jaime Géliga, Branch Chief USEPA Region 2, CEPD-MWPB

(787) 977-5840

I. Background:

On July 11, 2013 Murray Lantner, Jaime Géliga, and Alex Rivera of EPA Region 2 conducted field screening of the storm sewer main, on De Diego Avenue which is tributary to the DNER De Diego Pump Station. The DNER De Diego Pump Station discharges to the Condado Beach and Atlantic Ocean near the Municipality of San Juan's Parque del Indio.

The inspection was coordinated with the Puerto Rico Department of Transportation and Public Works (DTPW) and was represented by Eng. David Moreno and Jeannette Villamil.

II. Inspection Purpose:

The main purpose of the inspection was to identify the connection and contribution between DTPW's Municipal Separate Storm Sewer System (MS4) into DNER's De Diego Pump Station (PS). An additional purpose was to identify dry-weather flow sources entering into the DNER De Diego PS.

DTPW submitted a storm sewer map from the Municipality of San Juan to be used as a reference during the inspection. The map Figures 35, 43, and 50 are included at Attachment III. The map was prepared in the 1970's and was financed by a Grant from the USEPA. The figures in Attachment III include the drainage area and flow direction of the storm water collection infrastructure for DNER's Pumps Stations (Baldorioty, Stop 18, and De Diego). DTPW, using the Attachment III as a reference, alleges that no connection between the DTPW's Baldorioty de Castro Avenue and the DNER De Diego PS exists.

EPA conducted field screening of grab samples using Mardel Ammonia Test Strips (range from 0-6 mg/l) Note that these are not 40 CFR Part 136 approved methods, but are useful for field screening of outfalls. Ammonia has been used as a screening tool by some MS4s with severe or widespread sewage contamination. An ammonia concentration over 1 mg/l is generally considered to be a positive indicator for sewage contamination. Although some limitations have been identified, such as not detecting diluted sewage or elevated ammonia due to non-target sources such as irrigation, it does serve as a valuable screening tool (Section 12, P. 132 and 133 of the 2004 IDDE Manual http://cfpub1.epa.gov/npdes/stormwater/idde.cfm). EPA utilized a Chemetrics K-9400 detergent/surfactants sampling kit to conduct field testing for surfactants. Section 12.4 page 130 of the 2004 IDDE Manual indicates that surfactants concentrations in excess of 0.25 mg/l is an indicator that the discharge is contaminated with sewage or washwater.

There was no precipitation during the inspection. Weather data from the LMM International Airport reported 0.01" of precipitation on July 11, 2013 (http://www.nws.noaa.gov/climate/index.php?wfo=sju).

III. Inspection Findings:

The findings of the RI are included below:

- PR-37 (De Diego Avenue) is confirmed in DTPW's Storm Water Management Plan to be owned by the DTPW. Storm sewers and catch basins that serve the De Diego Ave. are therefore owned by the DTPW. The PR-26 (Baldorioty de Castro Expressway) and the north marginal of PR-26 are also owned by DTPW.
- De Diego Avenue and Estrella Street Intersection:

- a. Storm water manhole #1 (SW MH #1): Is located at the southwest corner of De Diego Ave. and Estrella Street intersection and at the corner in front of Diana's Pizza. See Attachment I Location Map for more details. EPA opened the manhole and observed two large circular pipes, circular pipe #1 and circular pipe #2. Both pipes with significant amount of dry-weather flow. See Attachment 2 Photos No. 1 thru No. 5 and Photo No. 10.
- b. Circular pipe #1 flow comes from the Baldorioty de Castro Avenue North Marginal Street and De Diego Ave. intersection. See Attachment I Location Map for more details. A grab sample was taken from circular pipe No. 1 within SW MH #1 and field testing, using ammonia test strips indicated that the ammonia level was between 1 to 3 mg/l. Additionally, using the surfactants sampling kit the result for surfactants was approximately 1.5 ppm (mg/l). There were no foul odors. See Attachment 2 Photo No. 2.
- c. Circular pipe #2 enters stormwater manhole No. 1 from the east. The flow comes from a parallel storm water collection manhole at the De Diego Ave. that appears to collects the flow from the Martín Travieso Street. See Attachment I Location Map for more details. A grab sample was taken and using ammonia test strips the ammonia level was between 0 to 0.25 mg/l. Additionally, using a surfactant sampling kit the results for surfactants was approximately 1.5 ppm. There were no foul odors. See Attachment 2 Photo No. 4.
- d. The flow from storm water manhole #1 enters directly into the DNER De Diego PS. This was confirmed through dye testing conducted during previous EPA inspections.
- e. Storm water #2 (SW MH #2): Located at the Baldorioty de Castro Avenue north marginal and De Diego Ave. intersection. See Attachment I Location Map for more details. EPA opened the manhole and observed dry-weather flow, north, in the direction of the De Diego Street DNER PS Area. The manhole appeared to be approximately forty feet deep. See Attachment 2 Photos No. 6 thru No. 9.
- f. A dye test was conducted to determine the source of circular pipe #1 flow. Green dye was applied at SW MH #2. The dye test determined that the dry-weather flow observed at storm water manhole #2 flows into storm water manhole #1 and subsequently into DNER De Diego PS. See Attachment 2 Photos No. 10 thru No. 12.
- g. Based on the ammonia and surfactant levels determined during field testing, the dry weather flow in the pipe leading from SW MH #2 (at the north marginal of the Baldorioty de Castro Ave.) flowing into SW MH #1 and then to the DNER De Diego PS) is considered a potential area of non-compliance that needs further investigation and collaboration between MSJ and the DTPW and PRASA to control and mitigate the illicit discharges of pollutants into the DNER De Diego PS and subsequently into the Condado Beach Area and the Atlantic Ocean.

PR-37 (De Diego Avenue) West Sidewalk - North of Calle Estrella and south of Loíza Street:

- a. Storm water manhole #3: Located at the De Diego Ave. sidewalk, adjacent to the public bus stop and the DNER De Diego PS property fence (diesel tank). See Attachment I Location Map for more details. EPA opened the manhole and noted dry weather flow and foul odors. A grab sample was taken using ammonia test strips the ammonia level was 0.25 mg/l. Additionally, using a surfactant sampling kit the results for surfactants was between 0.25 and 0.50 ppm. See Attachment 2 Photo No. 4. See Attachment 2 Photos No. 13 and No. 14
- b. Storm water manhole #4: Located at the De Diego Ave. (West) sidewalk adjacent to the eastern wall (along De Diego Avenue) of the Supermax supermarket. See Attachment I Location Map for more details. EPA opened the manhole and noted dry weather flow and foul odors. Wastewater was observed flowing east from under Supermax and entering the storm sewer (on the west side of the manhole) from an approximately 16 inch pipe at the bottom at the manhole. A grab sample was taken and using ammonia test strips the ammonia level was between 3 and 6 mg/l. This discharge had a strong sewage odor and there was algal growth in the 16" pipe. See Attachment 2 Photos No. 15 thru No. 18.

Additionally, a PVC pipe was found crossing the upper part of the manhole and connected into the storm drain at De Diego Street. Dry-weather flow was observed at the street curb and into the storm water drain inlet. The pipe appears to be flowing from the Supermax supermarket building. See Attachment 2 Photos No. 16 and No. 19 thru No. 22.

This area is considered a potential area of non-compliance that needs further investigation and collaboration between MSJ and the DTPW and PRASA to control and mitigate the illicit discharges of pollutants into the DNER De Diego PS and subsequently into the Condado Beach Area and the Atlantic Ocean.

- c. Storm water manhole #5 and #6: Located at the De Diego Ave. sidewalk to the right of Supermax supermarket. See Attachment I Location Map for more details. EPA opened the manholes and some dry weather flow was observed. No foul odors were noted. Both manholes are connected to the De Diego Street storm water inlet. De Diego Street storm water inlets are an appurtenance of DTPW. A grab sample was taken and using ammonia test strips the ammonia level was 0.5 mg/l. See Attachment 2 Photos No. 23 thru No. 27.
- d. Storm water manhole #7: Located at the De Diego Ave. sidewalk to the right of Supermax supermarket. See Attachment I – Location Map for more details. EPA opened the manhole and was found with significant amounts of grease accumulation. The flow channel at the bottom of the manhole was obstructed. See Attachment 2 Photos No. 28 thru No. 31.

This area is considered a potential area of non-compliance that needs further investigation and collaboration between MSJ and the DTPW and PRASA to control and mitigate the unlawful discharges of pollutants into the DNER De Diego PS and subsequently into the Condado Beach Area and the Atlantic Ocean.

e. PRASA wastewater manhole: Located at the De Diego Ave. to east of Supermax supermarket parking lot exit that is closest to the Supermax building. See Attachment I – Location Map for more details. EPA opened the manhole and found the system flowing normally at the half pipe channel, but with significant amount of solids and grease accumulation at the bottom. The manhole structure is shallow and is a recurrent overflow location during wet-weather based upon statements by DTPW personnel as well as reports received by EPA personnel. There is a storm water catch basin located near the manhole. See Attachment 2 Photos No. 32 thru No. 36.

This area is considered a potential area of non-compliance that needs further investigation and collaboration between PRASA, MSJ and the DTPW to control and mitigate the unlawful discharges of pollutants into the DNER De Diego PS and subsequently into the Condado Beach Area and the Atlantic Ocean.

- f. EPA recommends the MSJ, DTPW, and PRASA to work together in order to eliminate all of the illicit connections and illicit discharges
- g. Illicit connections/illicit discharges/ potential areas of non-compliance mentioned and described above are reaching the DNER De Diego PS and subsequently discharge into the Condado Beach and the Atlantic Ocean and must be eliminated.
- h. DNER, PRASA, DTPW, and MSJ must allocate its Illicit Discharge Detection and Elimination personnel and resources to address the areas of concern and potential areas of non-compliance identified and described above.
- 4) DNER De Diego PS Outfall (Condado Beach): Several individuals were observed surfing at the Condado Beach near to the DNER De Diego PS outfall. A warning sign was posted as agreed. Additionally, an individual was observed fishing near the DNER De Diego PS outfall.

Report prepared by:

Eng. Alex O. Rivera Environmental Engineer Dated: September 9, 2013

Attachment I - Location Maps

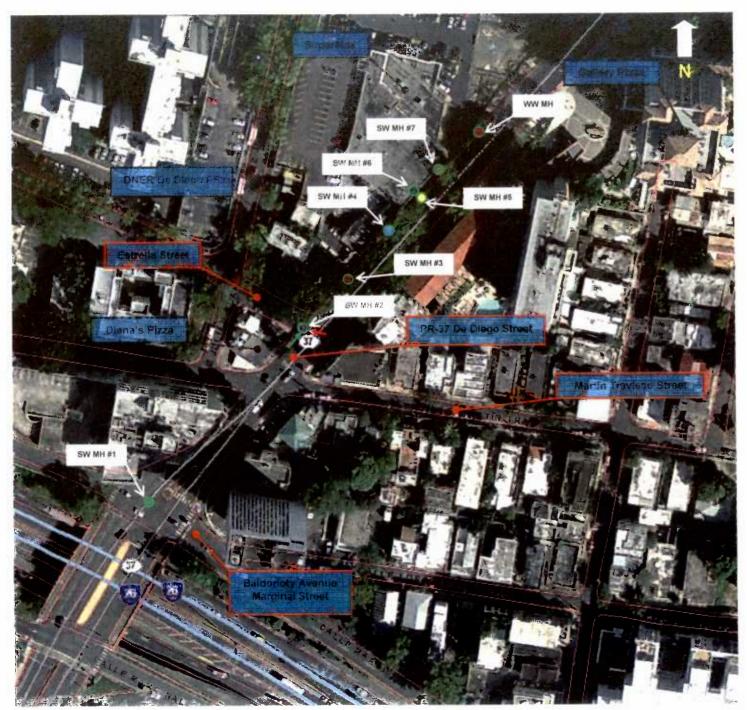
Attachment II – Inspection Photo Documentation

Attachment III - DTPW (1970's) Storm Sewer Map (Figures 35, 43 and 50)

ATTACHMENT I

Location Maps

ATTACHMENT I – LOCATION MAP



Legend*

Storm water manhole #1 (SW MH #1)

Circular pipe #1 flow direction

Circular pipe #2 flow direction

Storm water manhole #2 (SW MH #2)

Storm water manhole #3 (SW MH #3)

Storm water manhole #4 (SW MH #4)

Storm water manhole #5 (SW MH #5)

Storm water manhole #6 (SW MH #6)

Storm water manhole #7 (SW MH #7)

PRASA wastewater manhole (WW MH)

*Locations are approximated and are based on field observations and notes.

Aerial photo from the Puerto Rico Planning Board GIS Map Application.

ATTACHMENT II Photo Documentation

ATTACHMENT II - PHOTO DOCUMENTATION



DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 1

Storm water manhole #1

Note: Located at the southwest corner of De Diego Ave./Estrella Street intersection and at the corner of Diana's Pizza. Grab samples were taken at this location.

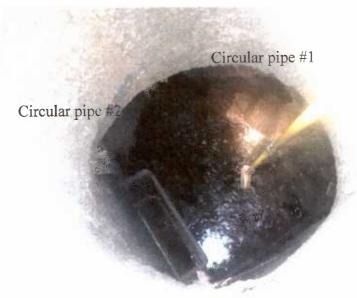
DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 2

Storm water manhole #1

Note: A grab sample was taken at circular pipe #1 and using ammonia test strips the ammonia level was between 1 to 3 mg/l. Additionally, using a surfactant sampling kit the results for surfactants was approximately 1.5 ppm.





July 11, 2013

Photo 3

Storm water manhole #1

Note: EPA opened the manhole and observed two large circular pipes, circular pipe #1 and circular pipe #2. Both pipes with significant amount of dry-weather flow.

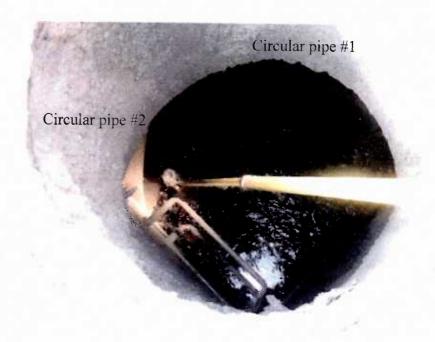
DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 4

Storm water manhole #1

Note: A grab sample was taken at circular pipe #2 and using ammonia test strips the ammonia level was between 0 to 0.25 mg/l. Additionally, using a surfactant sampling kit the results for surfactants was approximately 1.5 ppm.





July 11, 2013

Photo 5

Storm water manhole #1

Note: A piece of wood was found obstructing the flow that afterward flows into the DNER De Diego PS.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 6

Storm water manhole #2

Note: Storm water #2: Located at the Baldorioty de Castro Avenue north marginal and De Diego Avenue intersection.





DNER De Diego PS Drainage Area RI July 11, 2013

Photo 7

Storm water manhole #2

Note: The manhole has over forty feet deep.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 8

Storm water manhole #2

Note: EPA opened the manhole and observed dry-weather flow in direction to the De Diego Avenue DNER PS Area.





DNER De Diego PS Drainage Area RI July 11, 2013

Photo 9

Storm water manhole #2

Note: EPA opened the manhole and observed dry-weather flow in direction to the De Diego Avenue DNER PS Area.

DNER De Diego PS Drainage Area RI July 11, 2013

Photo 10

Storm water manhole #1

Note: View from storm water manhole #1 in direction of storm water manhole #2.





July 11, 2013

Photo 11

Storm water manhole #1

Note: A dye test determined that the dryweather flow observed at storm water manhole #2 flows into storm water manhole #1 and subsequently into DNER De Diego PS.

DNER De Diego PS Drainage Area Rl July 11, 2013

Photo 12

Storm water manhole #1

Note: A dye test determined that the dryweather flow observed at storm water manhole #2 flows into storm water manhole #1 and subsequently into DNER De Diego PS.





July 11, 2013

Photo 13

Storm water manhole #3

Note: Located at the De Diego Avenue Sidewalk, nearby the public bus stop and the DNER De Diego PS property fence (diesel tank). Grab samples were taken at this location.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 14

Storm water manhole #3

Note: EPA opened the manhole and dry weather flow and foul odors were noted. A grab sample was taken and using ammonia test strips the ammonia level was 0.25 mg/l. Additionally, using a surfactant sampling kit the results for surfactants was between 0.25 and 0.50 ppm.





July 11, 2013

Photo 15

Storm water manhole #4

Note: Located at the De Diego Avenue Sidewalk to the right of Supermax supermarket. Grab samples were taken at this location. EPA opened the manhole and dry weather flow and foul odors were noted.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 16

Storm water manhole #4

Note: A PVC pipe was found crossing the upper part of the manhole and connected into the storm drain at De Diego Avenue.





July 11, 2013

Photo 17

Storm water manhole #4

Note: Wastewater was observed flowing from an approximately 16 inch pipe at the bottom at the manhole. A grab sample was taken and using ammonia test strips the ammonia level was between 6 and 3 mg/l.

DNER De Diego PS Drainage Area RI July 11, 2013

Photo 18

Storm water manhole #4

Note: Wastewater was observed flowing from an approximately 16 inch pipe at the bottom at the manhole. A grab sample was taken and using ammonia test strips the ammonia level was between 6 and 3 mg/l.





July 11, 2013

Photo 19

Storm water manhole #4

Note: A PVC pipe was found crossing the upper part of the manhole and connected into the storm drain at De Diego Avenue. A grab sample was taken and using ammonia test strips the ammonia level was between 6 and 3 mg/l.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 20

Storm water manhole #4

Note: Dry-weather flow was observed at the street curb and into the storm water drain inlet.





July 11, 2013

Photo 21

Storm water manhole #4

Note: Dry-weather flow was observed at the street curb and into the storm water drain inlet.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 22

Storm water manhole #4

Note: Dry-weather flow was observed at the street curb and into the storm water drain inlet.





July 11, 2013

Photo 23

Storm water manhole #5

Note: Storm water inlet located at the De Diego Avenue Sidewalk to the right of Supermax supermarket.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 24

Storm water manhole #5

Note: Some dry weather flow was observed. No foul odors were noted. Manhole connected to the De Diego Avenue storm water inlet.





July 11, 2013

Photo 25

Storm water manhole #5

Note: Some dry weather flow was observed. No foul odors were noted. Manhole connected to the De Diego Avenue storm water inlet. A grab sample was taken and using ammonia test strips the ammonia level was 0.5 mg/l.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 26

Storm water manhole #6

Note: Manhole is connected to the storm water inlet at De Diego Avenue and showed at Photo No. 23.





July 11, 2013

Photo 27

Storm water manhole #6

Note: Water accumulation and storm water solids were observed.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 28

Storm water manhole #7

Note: Located at the De Diego Avenue Sidewalk to the right of Supermax supermarket.





July 11, 2013

Photo 29

Storm water manhole #7

Note: EPA opened the manhole and was found with significant amounts of grease accumulation. The flow channel at the bottom of the manhole was obstructed.

DNER De Diego PS Drainage Area RI July 11, 2013

Photo 30

Storm water manhole #7

Note: EPA opened the manhole and was found with significant amounts of grease accumulation. The flow channel at the bottom of the manhole was obstructed.





July 11, 2013

Photo 31

Storm water manhole #7

Note: EPA opened the manhole and was found with significant amounts of grease accumulation. The flow channel at the bottom of the manhole was obstructed.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 32

PRASA wastewater manhole

Note: Located at the De Diego Avenue to the right of Supermax supermarket exit.





July 11, 2013

Photo 33

PRASA wastewater manhole

Note: There is a storm water catch basin located near the manhole.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 34

PRASA wastewater manhole

Note: EPA opened the manhole and found the system flowing normally at the half pipe channel, but with significant amount of solids and grease accumulation at the bottom.





July 11, 2013

Photo 35

PRASA wastewater manhole

Note: EPA opened the manhole and found the system flowing normally at the half pipe channel, but with significant amount of solids and grease accumulation at the bottom.

DNER De Diego PS Drainage Area RI

July 11, 2013

Photo 36

PRASA wastewater manhole

Note: EPA opened the manhole and found the system flowing normally at the half pipe channel, but with significant amount of solids and grease accumulation at the bottom.





July 9, 2013

Photo 37

DNER De Diego PS Outfall

Note: Several individuals were observed surfing near to the DNER De Diego PS Outfall at the Condado Beach.

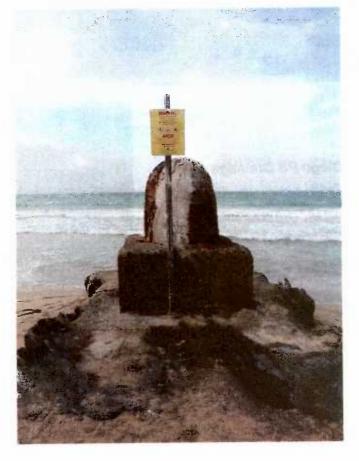
DNER De Diego PS Drainage Area RI

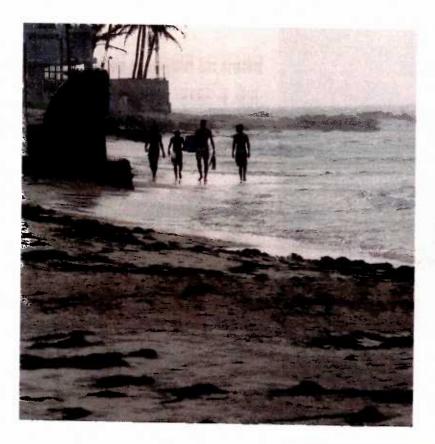
July 9, 2013

Photo 38

DNER De Diego PS Outfall

Note: Partial view of the DNER De Diego PS Outfall and its warning sign.





July 9, 2013

Photo 39

DNER De Diego PS Outfall

Note: Several individuals were observed walking near to the DNER De Diego PS Outfall at the Condado Beach.

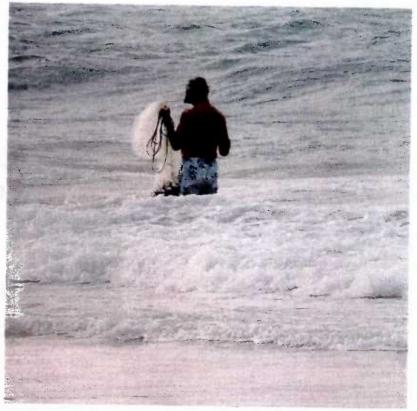
DNER De Diego PS Drainage Area RI

July 9, 2013

Photo 40

DNER De Diego PS Outfall

Note: An individual was observed fishing near the DNER De Diego PS Outfall at the Condado Beach.



ATTACHMENT III

DTPW's (1970's) Storm Sewer Map (Figures 35, 43 and 50)

ATTACHMENT III – DTPW'S (1970'S) STORM SEWER MAP



ATTACHMENT IV

DTPW Road Map (SWMP) De Diego Pump Station Area

ATTACHMENT IV – DTPW ROAD MAP (SWMP) DE DIEGO PUMP STATION AREA

